

SWBAT: measure amplitude and wavelength

Jan 4-7:20 AM

Welcome!!!

H. Leslie Grebe

SECA Physics
Friday 10 April 2015

* Pick up:

- blue concept sheet
- worksheet
- slip of paper (for later)



Opening Questions:

If a light blinks once every 10 seconds, what is the frequency of the blinks?

$$f = \frac{\#}{\text{TIME}} = \frac{1}{10 \text{ s.}} = 0.1 \text{ Hz}$$

Centering

Sep 7-7:04 AM

Outrageous Acts of Science

A show about viral videos and the science that makes them possible...

"Wave pool" Power Junkies #8

1. Just watch
2. Read the questions
3. Watch again
4. Discuss
5. Watch a last time to catch anything you might have missed



PARTICLE, WAVE [MEDIUM]
↓
STUFF THAT WIGGLES

Oct 4-7:27 AM

Concept Sheet

~ 7 rows when we're done...


We'll fill in two terms (rows) today.

| Concept | Meaning | Sym- bol | Units | Picture |
|--------------|--|---------------------|-------------------------------|-----------------------|
| FREQUENCY | HOW MANY PER UNIT OF TIME $FREQ = \frac{\#}{TIME}$ | f | hertz $Hz = \frac{1}{sec}$ | ∴ ∴ ∴ [00:01] |
| TRANSVERSE | WHEN THE MEDIUM VIBRATES <u>ACROSS</u> THE DIRECTION THE WAVE TRAVELS. | | | all → wave |
| LONGITUDINAL | WHEN THE MEDIUM VIBRATES <u>ALONG</u> THE DIRECTION THE WAVE TRAVELS. | | | → llllllll |
| AMPLITUDE | HOW FAR FROM THE MIDDLE. | A | meters m | ↑ A ↓ A |
| WAVELENGTH | HOW FAR FOR ONE "BACK & FORTH" | LAMBDA λ | meters m | ↑ A ↓ A λ |

Feb 18-6:50 AM

Experiments:

 http://www.youtube.com/watch?v=P-Umre5Np_0

 <https://ngsir.netfirms.com/englishhtm/SpringSHM.htm>

Hal

We

Apr 12-7:13 AM

What did we find?

AMPLITUDE
DOESN'T AFFECT
WAVELENGTH

FREQUENCY \uparrow
MEANS WAVELENGTH \downarrow

Apr 15-6:36 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

| Name | Period |
|------|--------|
| 1. | |
| 2. | |
| 3. | |

Sep 9-7:32 AM

1) AMPLITUDE means how wide (or far) from the middle.

2) The units for measuring wavelength are

A) seconds

B) Hertz

C) meters

3) What does the symbol λ stand for?

WAVELENGTH

Apr 12-7:15 AM